BRUHAT BENGALURU MAHANAGARA PALIKE

RR Nagar Division

Name Of Work : Providing Asphalt works at Selected reaches in ward no 17 Phase-03

Description of Items	Unit	No	Est .Cost Rs. L	B	D	60.00 Qty	Rate	Lakhs Amount
Road								
KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications. MORTH Chapter 3 P.No 143 I.No 19.1								
Desilting	Cum							
MES Road								
Soulders MES RD								
		96	2.00	0.85	0.60	97.92		
						97.92	235.76	**23085.62**
Basic Rate	130.00							
Add Loading and Unloading	57.00							
Add for lead for earth (1.28 Tonne / Cum) 16km	40.96							
Area Weightage 6%	7.80							
Total Rate	235.76							
KSRRB M2900-1. **Plain cement concrete 1:3:6** mix with crushed stone aggregate 40 m nominal size mechanically mixed, placed in foundation and compacted by vibration including curing complete as per specifications MORTH Specification No. 408 KPWD S.R 2018-19 Page No. 254 I.No. 34.1								
Soulders MES RD	Cum							
Soulders MES RD		96	2.00	0.85	0.15	24.48		
						24.48	4,479.56	**109659.63**
Basic Rate	4,226.00							
Area Weightage 6%	253.56							
Total Rate	**4,479.56**							
KSRB 5.14.1 : Providing and constructing precast concrete solid blocks with compressive strength not less than 3.5 Newton per sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x15x20cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications.-do with solid concrete blocks of size 400*200*200 mm (P-27/5.27.1) PWD SR 2018-19								
Flagging Course Solid Block	**Sqm**							
MES Road								
Soulders MES RD		192	2.00		0.40	153.60		
						153.60	966.72	**148488.19**
Basic Rate	912.00							
Area Weightage 6%	54.72							
Total Rate	**966.72**							
Providing ruled pointing to coursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, HOM curing complete as per specifications.– do – cement mortar 1:3(P-256/34.13.2) PWD SR 2018-19								
Pointing For Wall	**Sqm**							
MES Road								
Soulders MES RD		192	2.00		0.45	172.80		
						172.80	150.52	**26009.86**
Basic Rate	142.00							
Area Weightage 6%	8.52							
Total Rate	**150.52**							
KSRB 4-1.6 ; Providing and laying in **position plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing omplete as per specifications. Specification No. KBS 4.1, 4.2KBS No.5.4KBS 5.1.13(P-27/4.6) PWD SR 2018-19								
Copping For Wall	**Cum**							

MES Road								
Soulders MES RD		192	2.00	0.20	0.15	11.52		
						11.52	5747.32	**66209.13**
Basic Rate	5,422.00							
Area Weightage 6%	325.32							
Total Rate	**5,747.32**							

Providing & laying precast drain cover slab of 100 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge.(0.90 x 0.60 x 0.10) (Approved Data rate)

New Slab	**Sqm**							
Soulders MES RD		96	2.00	0.60		115.20		
						115.20	2337.00	**269222.40**
Data Rate	2,337.00							
Total Rate	**2,337.00**							

Footpath

KSRRB M300-14. Excavation for **roadwork** in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301(pg no-143,S.Lno-19.14)KPWD S.R 2018-19

Restoring	Cum							
For Pot Holes								
MES Road								
		4	1.50	1.20	0.30	2.16		
		3	1.80	2.00	0.30	3.24		
		6	1.20	1.20	0.30	2.59		
		4	1.00	1.80	0.30	2.16		
		6	1.00	0.85	0.30	1.53		
Cutting trench Portion/BWSSB								
MES Road								
		2	700.00	2.00	0.30	840.00		
						851.68	84.42	**71898.99**
Basic Rate	41.00							
Add for lead for earth (1.28 Tonne / Cum) for 16km	40.96							
Area Weightage 6%	2.46							
Total Rate	84.42							

Construction of granular **sub-base Grading-V** as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (pg no- 153,S.Lno-20.5)KPWD S.R 2018-19

Restoring	Cum							
Cutting trench Portion/BWSSB								
MES Road								
		2	700.00	2.00	0.15	420.00		
						420.00	1994.92	**837866.40**
Basic Rate	1,882.00							
Area Weightage 6%	112.92							
Total Rate	1,994.92							

KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 Page No. 155/ Item No. 20.18/ PWD SR 2018-19

Restoring	Cum							
For Pot Holes								
MES Road								
		4	1.50	1.20	0.23	1.66		
		3	1.80	2.00	0.23	2.48		
		6	1.20	1.20	0.23	1.99		
		4	1.00	1.80	0.23	1.66		
		6	1.00	0.85	0.23	1.17		
Cutting trench Portion/BWSSB								

MES Road								
		2	700.00	2.00	0.23	644.00		
Basic Rate	1888.00					653.0	2001.28	1306748.18
Area Weightage @ 6%	113.28							
Total	2001.28							

KSRRB M500-6. Providing and applying **primer coat with S.S. bitumen emulsion** on prepared surface of granular base such as WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 158/ Item No. 21.6/ PWD SR 2018-19 Issue Rates

Restoring	Sqm							
For Pot Holes								
MES Road								
		4	1.50	1.20		7.20		
		3	1.80	2.00		10.80		
		6	1.20	1.20		8.64		
		4	1.00	1.80		7.20		
		6	1.00	0.85		5.10		
Cutting trench Portion/BWSSB								
MES Road								
		2	700.00	2.00		2800.00		
Basic Rate	32.00					2838.9	33.92	96296.84
Area Weightage @ 6%	1.92							
Total	33.92							

KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 Page No. 158/ Item No. 21.7/ PWD SR 2018-19 Issue Rates

Resurfacing	Sqm							
B) For BC								
For Bc = Cleaning Qnty + Primer Coat Area		1	2838.94			2838.94		
For Bc						2838.94	12.72	36111.32
Basic Rate	12.00							
Area Weightage @ 6%	0.72							
Total	12.72							

KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. Clause 505 of morth V revision using 40/60 TPH capacity H.M.P. with mechanical paver Gr-II (50mm to 75mm) with 4.5% VG-30 Bitumen. Page No. 160/ Item No. 21.17.6/ PWD SR 2018-19 Issue Rates

Resurfacing	Cum							
MES Road								
		4	1.50	1.20	0.05	0.36		
		3	1.80	2.00	0.05	0.54		
		6	1.20	1.20	0.05	0.43		
		4	1.00	1.80	0.05	0.36		
		6	1.00	0.85	0.05	0.26		
Cutting trench Portion/BWSSB								
MES Road								
		2	700.00	2.00	0.05	140.00		
						141.9	7292.80	1035191.08
Basic Rate	6880.00							
Area Weightage @ 6%	412.80							
Total	7292.80							

KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision. -using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen (Pg:162, It.No-21.22.6 PWD SR:2018-

Resurfacing	Cum							

For Asphalt								
MES Road								
		4	1.50	1.20	0.040	0.29		
		3	1.80	2.00	0.040	0.43		
		6	1.20	1.20	0.040	0.35		
		4	1.00	1.80	0.040	0.29		
		6	1.00	0.85	0.040	0.20		
Cutting trench Portion/BWSSB								
MES Road								
		2	700.00	2.00	0.040	112.00		
						113.56	**8450.32**	**959598.06**
Basic Rate	7972.00							
Area Weightage @ 6%	478.32							
Total	**8450.32**							

KSRRB M800-13. **Road Marking with Hot Applied Thermoplastic Compound w** ith Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 Page No. 182/ Item No. 24.15 PWD SR 2018-19

Road Marking	Sqm							
MES Road								
		2	700.00	0.10		140.00		
						140.00	**454.74**	**63663.60**
Basic Rate	429.00							
Area Weightage @ 6%	25.74							
Total	**454.74**							

Sub Total	**5050049.30**
TP 5 %	**252502.47**
GST 12%	**636306.21**
PMC 1%	**60000.00**
Miscellaneous	**1142.02**
Grand Total	**6000000.00**

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary
2 The Estimate is prepared as per the PWD SR 2018-19
3 The Provision made in estimate are adequate and essential
4 This area comes under BBMP limits.

Asst Engineer
Ward-17
BBMP

Asst Executive Engineer
Yeshwanthpura Sub Division
BBMP

Executive Engineer
RR Nagara Divison
BBMP

To
Pl pudeup
& T/S-ID, Kaveri

ನಂ.: 205 ದಿನಾಂಕ: 29/12/2020
ರೂ. Sixty lakhs only.
ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ.
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ರಾಜರಾಜೇಶ್ವರಿ ನಗರ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-72

TECHNICAL SANCTION
Rs: 60,00,000/- (Rs sixty lakhs only) is accorded
under the head: P - 3726
By CE(T.R.R.N.) Pg.No 78-79
Registered as CE (R.R.N) no. 302/20-21 subject
to condition contained in enclosed memo
No: 302/20-21 Dt: 10/2/21
TA,
CE (R.R.N.)